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The purpose of this study was to generate hypotheses which could feasibly be studied through the use of a data bank on Indian children. The study also produced some findings concerning the educational population (ages 6 through 18) of the Papago, Pima, and Maricopa tribes. An extremely high percentage of Indian children remain in school through the eighth grade. A substantial portion of this population is behind in grade placement as measured by expected grade age, possibly because of late initial entrance into the first grade, and retention in the first three grades due to lack of facility in the English language. The dropout rate is serious with 22.3 percent of Indian students leaving school before graduation. It was concluded that before research in Indian education could be productive and useful, further identification and description of the Indian population should be made. The document contains numerous tables of statistical data relating to the study. (DK)

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# A Study of Southern Arizona School-Age Indian Children 1966-1967

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Tucson
1967

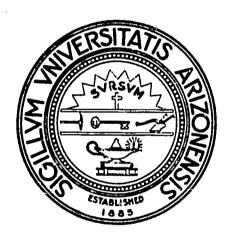
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# A STUDY OF SOUTHERN ARIZONA SCHOOL-AGE INDIAN CHILDREN

The subject of this report is a population of school-age Indian children with the following characteristics: They are members of the Papago, Pima and Maricopa tribes, with one-quarter or more Indian ancestry, ages 6 through 18, who have not graduated from high school and whose usual residence is in southern Arizona (Maricopa, Pinal, Pima and eastern Yuma counties).\*

Principal attention is given to two groups:

- (1) Those whose age in calendar year 1966 was 6 through 18 and who were listed on school records in the fall of 1966 in grades pre-primary through 12. The number in this group is 5850.
- (2) Those whose age in calendar year 1966 was 16, 17 and 18. The number in this group (which contains °?2 individuals from Group 1) is as follows: Enrolled in school, 1022; not in school, 302; information not available, 28; total, 1352.

In all tables the first group above will be referred to as the "Enrolled Population" and the second group will be referred to as the "Ages 16-18 Population."

It was not our purpose to produce no more than tables of statistics, however valuable they might be. The project was designed for the explicit purpose of suggesting meaningful hypotheses that could then be tested through the use of a data bank



<sup>\*</sup>Sample surveys, this year and last, permit us to estimate that the total school-age Indian population, as defined here, is as follows: Enrolled in school, 6564; not enrolled in any school, 412; information not available, 108; total, 7084.

where each child is identified, and which contains the full range of data on each child plus social, economic and educational information on their parents.

Our principal findings may be summarized as follows:

With extremely few exceptions, Indian children remain in school through the eighth grade.

A substantial majority of Indian students are behind in grade as measured by age. There are two principal reasons for this. Many Indian mothers do not send their children to school until they are seven, and a high percentage of Indian children spend four years getting through the first three grades. Subsequent retention in grade produces a final situation where 86 percent of 16, 17 and 18 year old indian students are behind in grade.

The high school "dropout" rate is serious, with 22.3 percent of all Indian students between the ages of 16 and 18 leaving school before graduation. Most seriously affected are girls with a rate of 24.5 percent. The consequence is that 2.5 percent of the Indian student body graduated from high school last year, compared with 4.7 percent of Arizona public school students the same year.

#### Design and Procedures.

The material in this report is based upon, and is made possible by, the Papago-Pima-Maricopa population register maintained by the Bureau of Ethnic Research. By means of this register we are able to identify a universe of school-age Indian children, assign them to tribal and reservation affiliation, and determine the degree of Indian ancestry.

The school census involved three operations: (1) the matching of school enrollment lists against the register to identify the

students reported in school and to identify the students unaccounted-for in school records; (2) a survey of schools to determine the whereabouts of unaccounted-for students previously enrolled or related to enrolled students, and (3) a 25 percent sample survey to determine the whereabouts and the enrollment status of the 16, 17 and 18 year olds who were still unaccounted-for at the end of our school survey.

This is the third year of our school census project and the second year in which we have secured data on all three tribes involved: Papago, Pima and Maricopa.\* Previous experience, together with data collected in earlier years, permitted us to use the following method in our 1966-67 survey.

The first step was the preparation of 1965-66 enrollment lists for each school. These lists were then delivered or mailed to the schools with the request that the list be checked against 1966-67 enrollment. They were also asked to give us what information they had on students who did not return to school in the fall of 1966 and to provide full information on each new student. At the same time, a field program was in progress in which members of the project staff were making inquiry in the schools with respect to children of school age who were not reported in school the previous year.

At the conclusion of this work, lists were matched against our register records of all school-age Indian children who were eligible for inclusion in our study. Two groups from our population register were thus identified: School-age children picked up in our school survey and school-age children who remained unaccounted-for. For the first group we punched a set of cards which contained the following information:

<sup>\*</sup>In our tables the Maricopa are grouped with the Pima.

- 1. Name
- 2. Date of birth
- 3. Sex
- 4. Percent of Indian ancestry
- 5. Tribal affiliation
- 6. Origin (place of birth or early childhood)
- 7. Current residence
- 8. Identification number of parents
- 9. Enrollment status
- 10. School attended
- 11. Control and orientation of school
- 12. Grade (with division within grade)
- 13. Nature of ungraded status
- 14. 1965-66 attendance record

The second group, which consisted of the school-age children who had not been accounted for, was set aside in the form of a duplicate set of cards from our register and, as such, contained the identification and descriptive data from our register. It was from this second deck that we secured a list of 448 children, ages 16 through 18, for special study.

Acknowledgments. Much of the design for the present study is based upon the experience gained during the past two years, especially the project of a year ago which was designed and completed by Harland Padfield, Peter Hemingway and Philip Greenfeld, all members of the staff of the Bureau of Ethnic Research.\*

For this year's project, field work and data processing were under the direction of Elmer C. Long. Janet Hastings was in charge of clerical work. Their assistants at various times were Ruth Meade, Jerry Weaver, Ruth Sifton, Cecelia Garcia, Betty Beard and Gary McCoy.

<sup>\*</sup>Harland Padfield, Peter Hemingway and Philip Greenfeld, The Pima-Papago Educational Population, A Census and Analysis, Journal of American Indian Education, Vol. 6, No. 1, 1966.

They have my sincerest appreciation for the care, the energy, and the high order of versatility, each brought to this undertaking. They all join with me in expressing the Bureau's obligation to the administrators, Indian counselors, and secretaries in all the schools, who, in most cases, devoted their own time to filling in our forms and helping us to search for missing Indian children.

The project was financed under a joint contract with the Arizona State Department of Public Instruction, the Bureau of Indian Affairs and the Southwestern Cooperative Educational Laboratory. We wish to express deepest appreciation to Mr. Wayne Pratt and Mr. Paul Bramlet of the Bureau of Indian Affairs, to Mr. W. Maurice Gemmell, Director of the Division of Indian Education for the State of Arizona and Dr. John T. Greer, head of the Tucson regional office for the Southwestern Cooperative Educational Laboratory, for their advice and encouragement in the conduct of this project.

#### Measures of Performance.

We have applied three measures of performance: An agegrade ratio, a promotion-retention ratio, and a measure of days in attendance compared with total days enrolled. None are meaningful in themselves but acquire some meaning when one group of Indians is compared with another or when Indians are compared with non-Indian students in the same school situation.

Age-Grade Ratios. With some variation among school systems, the general policy of educators today is to promote a student from one grade to the next each year. When this is not done, it usually means that the student is judged incapable of making any progress in the next higher grade. On the whole, therefore, a student who is behind grade has been placed in this position for some nonacademic reason: Failure to enter school at the age of six, school policy that holds non-English speaking six-year-olds in a pre-primary grade, or prolonged absence from school. Some students, however, are retained in grade for academic reasons



and this, plus prolonged absences from school, must account in some measure for the predominance of Indians, when compared with Arizona public school students, who are two years or more behind in grade.

This study did not inquire into the reasons for Indian retardation and retention in grade. The bare statistics in our tables indicate, however, that the situation calls for inquiry and solution. The 1051 Indian students (Table 3) who are behind in grade two or more years can mean no less than a serious failure in the educational system somewhere along the line.

Table 1 shows the distribution of Papago-Pima-Maricopa children by age and grade. Table 2 is a comparison of Papago Reservation elementary school students in 1953 and 1967. The great improvement is in the reduction of the number of students who are three or more years behind in grade (24.2% in 1953 compared with 1.7% in 1967).

Table 1

	Enrolled Population Distribution of age by grade								ָּסָ						
Age							Gra	d e							Ungraded
	В	1	2	3	4	5	6	7	8	9	10	11	12	Total	   Ung
6	60	399	10											469	
7	9	205	358	13										535	7
8		41	222	255	7	1								526	9
9		8	42	279	202	5								536	6
10			12	53	264	164	6							499	10
11			2	5	72	243	161	3	1					487	9
12				2	11	79	254	141	8					495	8
13			1		4	20	79	204	121	5				434	12
14						5	19	93	202	105	3			427	3
15						1	4	19	100	201	76	2		403	3
16		•						8	23	106	170	59	3	369	3
17									4	32	82	130	51	299	14
18										8	32	75	118	233	4
Total	69	653	647	607	560	518	523	468	459	457	363	266	172	5762	88

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Table 2

Age-grade percentages of Papago Reservation students in grades one through eight in 1953 compared with students in the same grades and schools in 1966-67 and with our enrolled population in the same grades.

	Papag Reserva 1953*	tion	Papag Reserva 1966-6	tion	All Indian Students 1966-67	
Status**	Number of Students	Pct.	Number of Students	f Pct.	Number of Students	Pct.
Above Grade	2	. 2	14	1.4	54	1.2
In Grade	201	22.4	337	39.6	18 <b>0</b> 1	40.0
One Year Behind	289	32.2	<b>4</b> 50	<b>4</b> 6. 1	1933	42.9
Two Years Behind	189	21.0	109	11. <b>2</b>	568	12.6
Three or More Years Behind	217	24.2	17	1.7	148	3.3
Total	898	100.	977	100.	4504	100.

<sup>\*</sup>James E. Officer, Indians in School, Bureau of Ethnic Research, 1956.



<sup>\*\*</sup>Status is determined according to an in-grade norm which calls for entrance into the first grade of all children who will have their sixth birthday during the calendar year they commence school. With promotion each year the student is expected to enter second grade during the year he is seven, the third grade during the year he is eight and so on up. According to this norm, a high school senior will graduate during the calendar year that he is 18.

Table 3 compares our enrolled population with all students in Arizona public schools. Almost sixty-three percent of Indians are behind in grade compared with twenty-one percent of public school children in the same category. The problem may be treated in two parts: (1) late entrance in the first grade and (2) retention in grade.

Table 3
Enrolled Population

Age-grade percentages of Indians in grades one through twelve compared with all students in the same grades in Arizona public schools.

	Enrolled 1	lian Population	All Students in Arizona Public Schools*		
Status	Number	Pct.	Number 	Pct.	
Above Grade	67	1.2	76, 106	19.6	
In Grade	2092	36.3	230, 149	59.4	
One Year Behind	2552	44.3	62,897	16.2	
Two Years Behind	831	14.4	14,106	3.6	
Three or More Years Behind	220	3.8	4,237	1.1	
Total	5762**	100.	387, 495	100.	

<sup>\*</sup>Annual Report of the Superintendent of Public Instruction to the Governor of Arizona, fiscal year 1965-1966.

<sup>\*\*88</sup> ungraded students are not included.

Late Entrance. Data from our population register indicates that there were about 600 Papago, Pima and Maricopa Indian children in southern Arizona who were six years of age in 1966. Of this number, 399 were enrolled in the first grade and ten in the second grade. The remaining 191 are either in a pre-primary grade or not enrolled in school at all. We account for 60 in a pre-primary grade, but this is undoubtedly low. In any event, about one third of the six-year-old age group did not enter the first grade. Most will enter the first grade in the fall of 1967 when they are seven and thus account for a good share of the students who, at that time, will be one year behind in grade.

Retention in Grade. The second measure of performance refers to the ratio of students in various categories who are retained in grade compared with those who are promoted. In the section above, this was referred to as one of the reasons why Indian students, more than non-Indians, are behind in grade as measured by their age.

Our retention rates are calculated on the number of Indian students in a particular grade last year compared with the number of students who were retained in that same grade at the beginning of this year. This is not an entirely accurate measure, since some students reported retained this year were not reported in school last year, and some students in school last year did not return to school this year, but it is sufficiently valid for our purposes and better than any other method available to us.

Table 4 gives the distribution of Indian students retained in each grade at the beginning of the 1966-67 term. When this information is broken down by type of school and when Indians are compared with public school children in the state (Table 5) some interesting data emerge.

Comparing Indians with non-Indians, it is seen that the Indian age-grade lag problem, as it relates to retention in grade, is generated in the first three years of school. More than two-thirds

of the Indian students retained are in these grades, and the retention rate for Indians in the first three grades is almost twice as great as for public school children.

Table 4

Enrolled Population

Number and percentage of children retained in each grade

Grade	Number in Grade 1965-1966	Number Retained 1966-1967	Percent Retained
First	666	104	15.62
Second	570	40	7.02
Third	569 ·	36	6. 33
Fourth	<b>50</b> 6	11	2. 17
Fifth	5 <b>24</b>	11	2. 10
Sixth	493	4	0.81
Seventh	467	14	3.00
Eighth	478	5	1.05
Ninth	392	10	<b>2</b> . 55
Tenth	<b>3</b> 76	12	3. 19
Eleventh	262	1	. 38
Twelfth	158	8	5.06
Total	5461*	256	4. 69

<sup>\*219</sup> pre-primary, ungraded, and students in unknown grade not included.

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Table 5
Enrolled Population

Retained students in various grades by control of school compared

with retained students in Arizona public schools.

with retained students in Arizona public schools.							
	Indians in Public School	Indians in Catholic Mission Schools	Indians in Federal Day Schools	Indians in Federal Boarding Schools	Indians in Other Schools	All Indian Students	All Students in Arizona Public Schools
GRADES 1-3							
Enrolled 1965-66	996	301	480	0	28	1805	105,597
Retained 1966-67	87	28	62	0	3	180	5,652
Percent Retained	8.73	9.30	12.92		10.71	9.97	5.35
GRADES 4-8						-	
Enrolled 1965-66	1 <b>3</b> 65	396	424	216	67	2468	153,459
Retained	20	7	14	2	2	45	1,242
Percent Retained	1.47	1.77	3.30	0.93	2.99	1.82	0.81

Table 5, Continued

Enrolled Population

- Top	ara cro	<u>.</u>					
	Indians in Public School	Indians in Catholic Mission Schools	Indians in Federal Day Schools	Indians in Federal Boarding Schools	Indians in Other Schools	All Indian Students	All Students in Arizona Public Schools
GRADES 9-12							
Enrolled 1965-66	518	201	0	441	28	1188	93,824
Ret <b>ai</b> ned 1966-67	21	1	0	8	1	31	3,558
Percent Retained	4.05	0.50	~~	1.81	3.57	2.61	3.79
ALL GRADES							
Enrolled 1965-66	<b>2</b> 879	898	904	637	123	5461	352,880
Retained 1966-67	128	36	76	10	6	256	10,452
Percent Retained	4.45	4.01	8.41	1.52	4.88	4.69	2.96

Among Indian students in the first three grades, those who attend federal day schools are much more apt to be retained in grade than those who attend public schools (12.9% to 8.7%).

No one knows why Indian families, in fairly large numbers, fail to send their children to school at the age of six and no one knows why almost ten percent of those in the first through third grades were retained in grade in the fall of 1966. A field survey, based upon a sample of all southern Arizona Indian children, ages five through eight, in and out of school, would fill great gaps in our knowledge of Indian education.

The unexpected finding is that Indian students, once they enter high school, go through to graduation with little trouble provided they stay in school. The retention rate is less than for non-Indians (2.6% compared with 3.8%). The statistics, however, may reflect no more than school policy. Indians in public schools are retained in high school grades at about the same rate as non-Indians while comparatively few Indians in federal and mission high schools are retained in grade.

Attendance. We assembled statistics on attendance for the purpose of stratifying Indian students on the basis of multiple variables that might point to specific classes of students who encounter the greatest and the least difficulty in the American school system. In the meantime, our findings are of some interest.

Attendance percentages are calculated on the basis of the total days enrolled divided by the days in attendance. All data are for the school year 1965-66. We found that Indian boys attend more regularly than Indian girls, that promoted students have better attendance records than retained students, and that Papago children have better attendance records than Pima-Maricopa children.

There is some evidence, in support of a general assumption, that Indian children in non-Indian schools attend school less regularly than Indian children in Indian schools (Table 6).

Enrolled Population
Average attendance
by orientation and type of school

Table 6

Orientation	Type of School	Number with Attendance Record	Average Attendance
NON-INDIAN	Public	2162	90.9
	Catholic Parochial	44	94.8
INDIAN	Public	365	95.3
	BIA Day	797	94.6
	BIA Boarding	375	93.5
	Cath. Mission	653	93.2
	Prot. Mission	14	98.2
Total		4410	92.6

### Enrollment Statistics.

Residence. Because of an error in our instructions for the reporting of residence, our data this year are unusable for purposes

of geographical location. Information from our survey of a year ago, however, indicates that far more Pima-Maricopa children are reservation residents than Papago children (69.4% to 54.8%). This is in keeping with other information as to the residence of these two populations.

Distribution by Age and Grade. As is true of all schools, Table 7 shows that progressively fewer Indian students are enrolled as grade level increases. The table, however, shows unusually high percentages in the primary grades and unusually low percentages in the high schools grades. An interesting difference from a year ago, which is probably significant, is that the sharp drop in enrollment in 1965-66 occurred between the eighth and ninth grades (8.42% compared with 6.90%), whereas this year the drop occurred between the ninth and tenth grades (7.81% compared with 6.21%).

Table 7
Enrolled Population by Grade

Grade	Papago	Pima	All Students	Pct.
Beginners	33	36	69	1. 18
1	317	336	653	11.16
2	315	332	647	11.06
3	299	308	607	10.38
4	280	280	560	9. 57
5	291	227	518	8.85
6	301	222	523	8.94
7	263	205	468	8.00
8	238	221	459	7.85
9	239	218	457	7. 81
10	39	174	363	6. 21
11	138	128	266	4.55
12	80	92	172	2. 94
Special -		•	- · <b>-</b>	2. , 2
Ungraded	49	39	88	1.50
Total	3032	2818	5850	100.00

Table 8, showing the distribution of the enrolled population by age, indicates, once again, the relatively fewer numbers of six-year-olds who enter school. Eight percent of Indian students are six years old while slightly more than nine percent of public school students in Arizona are this age. The other point of interest, with respect to Indian education, is the relatively large number of 18-year-olds (4% of the enrolled population) who have not graduated from high school. The comparable state percentage is 1.75.

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Table 8
Enrolled Population by Age

Age	Papago	Pima	All Students	Pct.
6	230	239	469	8.02
7	297	295	59 <b>2</b>	10. 12
8	261	274	535	9. 15
9	265	277	542	9. 26
10	269	240	509	8.70
11	271	<b>22</b> 5	496	8.48
12	266	237	<b>50</b> 3	8.60
13	241	205	446	7.62
14	235	195	430	7.35
15	204	202	406	6.94
16	199	173	372	6.36
17	161	152	313	5.35
18	133	104	237	4.05
Total	3032	2818	5850	100.00

Control and Orientation of Schools Attended by Indians. The majority of both Papago and Pima-Maricopa children attend public schools, on and off the reservation. The distribution of other students by control of schools (Table 9) shows some marked differences by tribe. Compared with the Pima-Maricopa, fewer Papago are in federal schools and more are in Catholic mission schools.

Table 10 gives the percentages according to whether the school is predominantly Indian (Indian oriented) or predominantly non-Indian. A good many more Papago attend Indian schools than non-Indian while, to a lesser extent, the reverse is true for the

Pima-Maricopa. Taking the two groups together, a small majority of our enrolled population continues to attend Indian oriented schools.

Table 9

Enrolled Population

Distribution by tribe and by control of school

Control of School	Papago	Pct.	Pima	Pct.	All Students	Pct.
Public	1677	55.3	1566	55.6	3243	55.4
Federal	689	22.7	913	32.4	1602	27.4
Catholic Mission	58 <b>2</b>	19. <b>2</b>	300	10.7	882	15.0
Catholic Parochial	49	1.6	7	0.2	56	1.0
Protestant Mission	23	0.8	23	0.8	46	0.8
Institutions	12	0.4	9	0.3	21	0.4
Total	3032	100.0	2818	100.0	5850	100.0

Table 10

Enrolled Population
Distribution by orientation and type of school attended

Orientation	Control	Papago	Pima	All Students	Pct.
NON-INDIAN	Public	1327	1436	2763	47. 23
	Catholic Parochial	49	7	56	0.96
	Institutions	12	9	21	0.36
Subtotal		1388	1452	2840	48.55
INDIAN	Public	350	130	480	8.20
	Federal Day	267	647	914	15.62
	Federal Boarding	422	266	688	11.76
	Catholic Mission	582	300	882	15.08
	Protestant Mission	23	23	46	0.79
Subtotal		1644	1366	3010	51.45
Total		3032	2818	5850	100.00

The geographical distribution of southern Arizona Indian children, by orientation of school, is best shown in Table 11. Among other things, the continuing importance of boarding schools for Indians is indicated, with 18 percent of all students (mostly in the upper grades) attending either federal or mission boarding schools.

The large number of students in public schools off the reservation is accounted for in part by the relatively high numbers of Pima-Maricopa reservation children who are sent by bus each day to attend public schools in surrounding communities. Tuition cost for these children is met, in whole, or in part, by the federal government.

The pressure on Arizona public schools to establish special programs and special training for teachers to meet the needs of Indian children is increasing. Our count of schools and the number of Indians attending each school indicates that the solution to this problem will not be easy. There are 56 schools with one to four students each, 41 with five to ten, and 40 with 11 to 20. One hundred and thirty-seven schools thus enroll 20 or less Indian students each. The total number of students involved is 958, 16.4 percent of all enrolled students.

Table 11
Enrolled Population

Location and orientation of schools attended by southern Arizona school-age Indian children

## INDIAN ORIENTED SCHOOLS ON THE RESERVATIONS

School	Papago	Pima	Total
Federal Day Schools	267	647	914
Papago Reservation	226	2	228
Gila River Reservation	39	514	553
Salt River Reservation	2	131	133
		101	133
Federal Boarding Schools	91	41	132
Papago Reservation	85	0	85
Fort Apache, Arizona	6	41	47
Catholic Mission Schools	424	123	547
Papago Reservation	424	0	424
Gila River Reservation	O	123	123
Protestant Mission Schools Ganado, Arizona	1 1	19 19	20 20
	1	1	

Table 11, Continued

School	Papago	<u>Pima</u>	Total
Public Schools	350	130	480
Sells, Papago Reservation	335	10	345
Sacaton, Gila River Reservation	15	120	135
Subtotal	1133	960	2093

## INDIAN ORIENTED SCHOOLS OFF THE RESERVATIONS

School	Papago	<u>Pima</u>	Total
Federal Boarding Schools	331	225	556
Phoenix, Arizona	164	49	213
Santa Fe, New Mexico	2	1	3
Riverside, California	93	96	189
Stewart, Nevada	72	79	151
Catholic Mission Schools	158	177	335
Laveen, Arizona	147	170	317
Santa Fe, New Mexico	11	7	18
Protestant Mission Schools	22	4	26
Holbrook, Arizona	6	3	9
Glendale, Arizona	14	1	15
Albuquerque, New Mexico	2	0	2
Subtotal	511	406	917

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Table 11, Continued

## NON-INDIAN ORIENTED SCHOOLS OFF THE RESERVATIONS

School	Papago	Pima	Total
Public Schools, Pima County	590	38	628
Tucson	333	21	354
Ajo	204	14	218
Continental	5	0	5
Marana	31	3	34
Sahuarita	6	0	6
Three Points	11	0	11
Sasabe	0	0	0
Public Schools, Pinal County	457	493	950
Casa Grande	162	188	350
Eloy	56	4	60
Coolidge	68	246	314
Picacho	32	0	32
Florence	25	10	35
Stanfield	45	14	59
San Manuel	0	$\frac{1}{1}$	1
Maricopa	69	30	99
Public Schools, Maricopa County	248	880	1128
Phoenix	60	276	336
Mesa	23	396	419
Tempe	13	19	32
Scottsdale	0	2	2
Tolleson	16	70	86
Laveen	0	32	32
Glendale	0	0	0
Chandler	15	55	70
Gilbert	3	7	10

Table 11, Continued

School	Papago	Pima	Total
Public Schools, Maricopa County, cont.			
Avondale	3	2	5
Buckeye	7	0	7
Arlington	31	0	31
Gila Bend	75	2	77
Higley	0	6	6
Queen Creek	1	13	14
Palo Verde	1	0	1
Public Schools, Yuma County*	27	4	31
Roll	18	0	18
Dateland	4	0	4
Wellton	5	4	9
TO 111 G 1 1 7 7 7			
Public Schools, Utah	5	21	26
Student Placement Program	5	21	26
Subtotal	1327	1436	2763
Catholic Parochial Schools	49	7	56
Tucson	2	0	<del>2</del>
Phoenix	10	1	2
Mesa	1	6	7
Casa Grande	2	0	2
Ajo	34	0	34
Institutions	12	9	21
Fort Grant	4	5	9

<sup>\*</sup>Colorado River Valley not included.

Table 11, Continued

School	Papago	Pima	Total
Institutions, cont.			
Tucson - Arizona Children's Home	0	0	0
Tucson - Arizona School for Deaf	4	2	6
Coolidge - Arizona Children's Colony	4	2	6
Total All Schools	3032	2818	5850

#### The 16-17-18 Age Group.

Information so far reported is available to any school system, or combination of school systems, that might be interested in counting the Indian children sitting in their classrooms. Much of it is comparable to the statistics published each year by the Bureau of Indian Affairs.\*

Starting with a total population from which all school-age children in southern Arizona can be abstracted, our method permits us to identify and locate the Indian children who are not in school and this, for a number of reasons, has not been done by the federal, mission and public school systems. These school systems do not operate a census of school-age children. The method used presupposes established families in stable communities where, if a child is not in school, this knowledge will soon reach attendance officers or other officials. But a great many Indian families are not stable in their residence pattern. An estimated one-fourth to one-third, seeking temporary and seasonal

<sup>\*</sup>Statistics concerning Indian Education, U.S. Department of the Interior, Bureau of Indian Affairs, Washington, D. C.

work, move in and out of school areas that are variously under the jurisdiction of the federal government, missionary societies, and a large number of public school districts. One thousand forty-seven school-age Indian children out of a total of 5850 (26.4%), enrolled in a different school in the fall of 1966 than the one attended in the fall of 1965. We have no statistics on moves that are made back and forth during the school year.

Much credit must go to the Indian families, under these circumstances, who see to it, as our findings last year disclosed, that there is little truancy among elementary school students. The same, for whatever reason, is not true among Indian high school students where dropout rates are high and where dropouts have been on the whole unknown and unreported.

Lack of funds made it impossible for us to pursue a project of survey research which would cover the entire age group, or to secure data on any group except on the basis of sampling procedures. We therefore elected to concentrate on the 16-17-18 age group. Information was secured in three ways: (1) from school enrollment lists where most were found to be in school, (2) from inquiry in the school buildings with respect to 16 through 18 year olds known not to be in school, and (3) from a sample study of the youngsters who remained unaccounted-for in the first two operations.

When we commenced this project we had 1460 Papago, Pima, and Maricopa children, ages 16 through 18 who are of one-quarter or more Indian ancestry. This data is contained in our total population register of these three tribes.

At the completion of the first two surveys, mentioned above, we found that 922 were enrolled in school, 90 were not enrolled, and 448 remained unaccounted-for.

Since we did not have the resources to find these 448 missing school-age children, we reduced the number to 112 by drawing a

25 percent sample. Taking this list of 112 into the field, we secured the information contained in Table 12.

Table 12

Age 16-18 Population
Information secured on the sample population

Categories	16	17	18	Total	Projection*
Outside our Population					
Deceased	1	3	2	6	24
H.S. Graduates	0	1	2	3	12
In Armed Forces	0	2	. 1	3	12
Out of Area	9	2	4	15	60
Subtotal	10	8	9	27	108
Within our Population					
In School	9	11	5	25	100
Out of School	11	16	26	53	212
Subtotal	20	27	31	78	312
Information not					
Available (INA)	0	4	3	7	28
Totals	30	39	43	112**	448

<sup>\*</sup>The number in the 25 percent sample multiplied by four.

\*\*This sample of 112 was drawn at random from the group of 448.

The sample is representative of the group for age, sex and tribal affiliation. None of the differences reach statistical significance.

Since the sample is representative for these variables there is reason to assume that it is also representative for the variables in Table 12. Because it was possible to draw but one sample from the 448 group, and because the distribution of the variables in Table 12 cannot be compared to any hypothesized distribution, confidence limits for them cannot be set.

The reader will note that 27 individuals in our sample do not qualify for inclusion in our school-age universe as defined at the beginning of this report. We found that six were deceased and therefore should not have been in our population register of living Indians. The others do not qualify for inclusion in our school project universe for the reasons stated in the preceding table.

We have elected to treat the information we secured from the 25 percent sample of our 448 "unaccounted-for" Indian children as representative of the universe from which it was drawn. After eliminating the 27 (projected to 108) who did not qualify for inclusion in our study, we have an estimated population of 1352 as shown in Table 13.

Table 13

Age 16-18 Population
Enrolled and not enrolled by source of data

Enrollment	Census Operation	Projected Sample	Total	Pct.
Enrolled in School	922	100	1022	75.6
Not Enrolled in School	90	212	302	22.3
Information not Available		28	28	2.1
Total	1012	340	1352	100.0

Our estimates indicate that, in addition to the 302 nonenrolled children in our 16 through 18 age group, there are about 100 who are 14 and 15 years of age. Among our 302 nonenrolled children, 59 are 16, 94 are 17, and 149 are 18.

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Distribution of the 16 through 18 age group by tribe and sex, as given in Table 14, indicates that girls, by a significant percentage, drop out of school more frequently than boys, and that Pima girls tend to leave school more readily than Papago girls. Information to be given later would indicate that early marriage, and often pregnancy, is the most frequent reason given when girls leave school.

Table 14

Age 16-18 Population
The nonenrolled by tribe and sex

Tribe and Sex	Total in Group*	Nonenrolled	Pct.
Papago Boys	353	65	18.4
Papago Girls	327	70	21.4
Pima Boys	321	78	24.3
Pima Girls	232	89	27.6

<sup>\*</sup>Twenty-eight on whom enrollment information was not available are not included.

It was one of our assumptions that an Indian student who became seriously behind in grade for his age would be most apt to drop out of school. Our statistics, although somewhat indefinite because of the large number of nonenrolled on whom we do not have this information, tend to support our assumption. As shown in Table 15, where we have no age-grade data on 50 nonenrolled students, sixteen percent of the nonenrolled dropped out of school when they



were three or more years behind in grade as compared with something over twelve percent of the enrolled.

The significance of Table 15, however, is that it reveals an extremely high percentage of grade retardation among all 16 through 18 year olds. Among the enrolled students, where data is available, 86 percent are one or more years behind grade, and 44 percent are two or more rears behind grade. This is undoubtedly a constant factor in the total situation that causes some students to be dropouts and pushouts.

Age 16-18 Population

Comparison of age-grade status of enrolled and nonenrolled at the time of leaving school

Status	Enrolled	Pct.	Nonenrolled	Pct.
Above Grade	3	0.29	0	
In Grade	118	11.54	36	11.92
One Year Behind	438	42.85	93	30. 79
Two Years Behind	287	28.08	74	24. 50
Three or More Years Behind	127	12.43	49	16. 22
Ungraded	25	2.45	~ ~	
INA	24	2.35	50	16.56
Total	1022	100.00	302*	100.00

<sup>\*28</sup> with enrollment status unknown are excluded.

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The Out-of-School Student. In our 16-17-18 age group we found that one boy is in prison, that 19 boys have been expelled from school and that four boys and 12 girls are mentally or physically incapacitated. Of these 16 nonenrolled children with incapacities, however, the condition was not such as to indicate a total inability to receive instruction. This group of 36 youngsters, plus the 28 about whom we know nothing, makes a total of 64. The remaining 119 boys and 147 girls, a total of 266, have various characteristics that may have had some bearing on their unsuccessful school careers. We first divided the group into those who had been in "trouble" and those for whom no "trouble" was reported. In this last group of 16 through 18 year olds with "no trouble," we arbitrarily placed the married girls who quit school because of pregnancy. So far as our records are concerned there are no pregnant Indian girls who are not married. Our results are contained in Table 16.

Table 16
Age 16-18 Population

Distribution of children "in trouble" and "not in trouble" by sex

Description	Male	Female	Total
No Difficulty Reported	63	82	145
Poor Grades & Attendance	24	52	76
Same Plus Jail Record	0	1	1
Failing Grades	1	0	1
Failing Grades & Drinking	4	0	4
Drinking	12	0	12
Jail Record	15	0	15
Disciplinary Problems	0	8	8
Family Problems	0	4	4
Total	119	147	266

Some Indian boys quit school, as some report, because it was necessary for them to go to work to earn a living for themselves and family. Others, of course, find that getting a job is a good excuse to leave school. Among the boys who are not in school, 50 are employed, 45 are not employed, and we have no data on 24. Among the girls, 18 are employed, 36 are not employed and we have no data on 93.

Undoubtedly some boys quit school to get married. We have no information on this. Among the girls, 77 were reported to have left school because they were married or wanted to get married. Of this number 17 were pregnant. A total of 70 girls left school without mention of marriage and, or these, 45 were not married at the time of our survey. We have no data on the other 25.

Our information is relatively meaningless when reduced to such bare st tistics. For this reason we are reproducing our field notes on 15 cases drawn at random from our sample survey:

Number 1. Pima girl, age 18, full Indian. Left public school 10th grade at age 17. Poor grades and poor attendance. Married after leaving school.

Number 2. Papago girl, age 18, three-fourths Indian. Left federal boarding school 9th grade at age 17. She is at home (in a reservation town) and is not married or working. Poor grades and poor attendance but she left school of her own accord.

Number 3. Papago male, age 18, full Indian. Left federal boarding school 9th grade at age 17. He was in some kind of trouble at school. Later he was sent to the federal camp in the Catalinas. After being discharged he was picked up and set to a federal prison in Colorado.

Number 4. Papago girl, age 17, full Indian. Left public school 10th grade at age 17. Family was not aware that she was out of school even though she reported extremely poor grades. There seems to be lots of family trouble. The father blames himself and has started drinking. Some chance that she will return to school.

Number 5. Pima girl, age 17, full Indian. Left mission school 9th grade at age 16. Because of poor grades she was held over in the 9th grade. She left school to keep house for a couple living off the reservation.

Number 6. Pima girl, age 17, full Indian. Left public high school at unknown grade and age. She is working at a factory (in an Arizona town). When in school her grades were 3's and 4's and her attendance was poor.

Number 7. Pima girl, age 16, full Indian. Left public school 10th grade at age 16. Grades lower than average. Living with sister and sister's husband. Tried night school but found transportation too difficult to secure. Sister's husband pays her to baby-sit for their child. She says she wants to return to school next year.

Number 8. Papago boy, age 17, seveneighths Indian. Left federal boarding school 9th grade at age 16. Lives with an uncle (in an Arizona town). Federal school officials would have returned this boy to their boarding school but could not locate him. He was going to get married but did not. Now working and would like to return to school.

Number 9. Pima girl, age 17, full Indian. Left federal boarding school 10th grade at age 16. Previously in public school and had poor grades and poor attendance. Was married shortly after leaving school.

Number 10. Pima boy, age 17, full Indian. Left public school 11th grade at age 16. Now

living with mother in Phoenix. He has joined the Job Corps and is now awaiting notice to report.

Number 11. Pima boy, age 18, one-half Indian. Left public school 12th grade at age 18. Attendance and grades were poor. Now looking for work.

Number 12. Pima boy, age 16, full Indian. Left public school 9th grade at age 15. He started the first semester last year but after ten straight days of absences he dropped school. Earlier record of poor grades and attendance. He is now living at home on the reservation where there are family difficulties. He is not working.

Number 13. Pima boy, age 18, full Indian. He was expelled from a federal boarding school for fighting while in the 11th grade at age 17.

Number 14. Papago boy, age 16, full Indian. Left public school 8th grade at age 15. Poor grades. Subsequently sent to a reform school, now released.

Number 15. Papago girl, age 18, three-fourths Indian. Left public school 8th grade at age 16. No indication of academic or other difficulties. Now living at home with family.

#### Conclusion.

Our experience in gathering and analyzing the data for this report draws attention to a problem that must be solved by tribal and federal officials before research in Indian education

will be productive and useful to those responsible for the education of Indian children. This is the problem of the identification and description of the population to be studied.

We commenced the task with what appeared to be a simple problem of collecting enrollment lists and searching out what we thought would be the relatively few school-age children unknown to school teachers. We found not just a few, but a whopping 340 in the 16 through 18 age category alone. We resolved the problem for this group by means of a sample survey. An estimated additional 894 in the six through fifteen age group remain unknown and unaccounted for in our statistics. This deficiency must be corrected before valid studies of a more meaningful and penetrating kind can be commenced.

This is not a University of Arizona problem. It is a problem that will be faced by any agency, including the Bureau of Indian Affairs, that undertakes to discover the weaknesses in existing educational methods for Indians and ways to improve these methods.

The only feasible answer is a data bank of school-age Indian children. We propose such a data bank for southern Arizona, but sooner or later they will be needed in all areas.

The universe contained in the data bank should probably be the children of legal members of the various tribes, living on and off the reservations.

This calls for a tribal roll. The fact that such rolls have never been created or maintained in Arizona, and elsewhere, has hampered not only research, but the administration of Indian affairs, for a great many years.

With a tribal roll, and using the school census methods employed in this study, a data bank of school-age children could be created. Once created, an electronic data processing



technique could be used to maintain the data bank in current status each year. A child would go into the records on the first day that he enters a school and it is determined on the basis of a birth certificate (where his tribal enrollment number could be recorded) that he is a legal member of an Indian tribe. He would be removed from the records at death or upon reaching his nineteenth birthday or, perhaps, when he has graduated from high school. Data on the student would be kept current on the basis of information now collected by every school teacher at the beginning of each year. The only extraordinary task would be the maintenance of data on school-age children who are out of school. This would need to be done, and should be done in any event, by student advisors, attendance officers, and the personnel in any agency whose normal task it is to learn why school-age children are not in school.

The American Indian is the only group in this country whose education, in the majority of areas, is the sole responsibility of the federal government. With millions of dollars of federal funds being expended for the improvement of education of children who have better schooling than Indians, and who are not, in strict sense, a federal responsibility, it does not seem to be too optimistic to predict that the Congress, and federal officials, will notice this irony and that before long they will do what should be done with this one educational responsibility that is in their own backyard.

Except for data on achievement test scores, the health status of Indian children, and their facility in the use of English, our quantitative approach has gone about as far as seems profitable. The next step should be the intensive interviewing and testing of sample groups of youngsters and their parents. This research, in turn, will need to be translated and tested, for practical application, by experts in education working in developmental classrooms.

Errors and shortcomings in Indian education, of course, are well known to Indian leaders and experimental minded educators.



Many of their ideas have not been adopted for lack of funds or because of a lack of flexibility with respect to staff assignments. It would be a shame, therefore, to undertake large scale and expensive projects of research before existing schools make use of what is already known about Indian children and Indian education.

